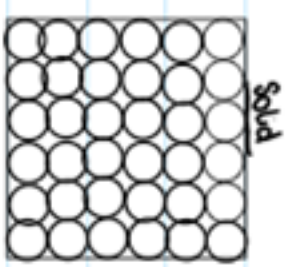


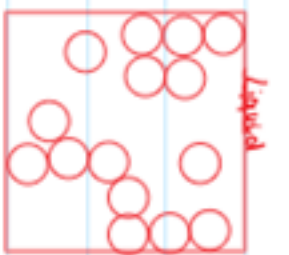
Particles

All objects are made up of small particles that form their shape and volume.

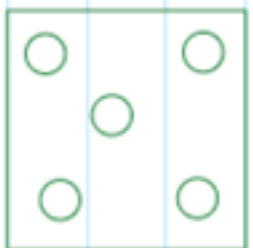
They are commonly found in 3 states: solid liquid gas



- Particles are close together.
- Arranged in a regular way.
- Fixed shape / volume.
- As energy is low, can only vibrate.



- Particles close together.
- Arranged randomly.
- Have enough space to move around, but not enough to be compressed.
- No fixed shape / volume.

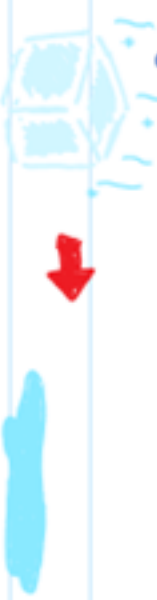


- Particles are far apart.
- Arranged randomly.
- Can move around each other.
- Can be compressed.
- No fixed shape / volume.

Physical change vs. Chemical change

Physical change = a change in which no new substances are formed.

Only the form of the substance has changed, not the chemical composition.



Chemical change: Any change that involves the change of substance (chemical makeup)



Diffusion

Diffusion is the movement of particles from a high concentration to a low concentration.

- Lighter molecules will diffuse faster than heavier molecules.